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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/696,961 | 10/27/2000 | Shinji Nishiwaki | 199176US2 | 3180 |

22850 7590 09/24/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

FREJD, RUSSELL WARREN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2128

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/696,961

Applicant(s)

NISHIWAKI ET AL.

Examiner

Russell Frejd

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,4,6 and 9 is/are rejected.
7) ☒ Claim(s) 2,3,5,7,8 and 10 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10.27.00, 3.4.04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

In re Application of: Nishiwaki et al.

Examination of Application #09/696,961

1. Claims 1-10 of application 09/696,961, filed on 27-October-2000, are presented for examination.

Specification Objections

2. The disclosure is objected to because of numerous grammatical errors resulting from the translation of the text from a foreign language. A careful reading the specification will reveal the areas requiring correction.

Claim Rejections under 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by the article authored by Manitius et al., hereinafter Manitius, entitled *Joint Node H_∞ Control Synthesis for Connected Flexible Beams*.

3.1 Manitius disclosed the invention as claimed, including a method of stabilizing an interconnected system of Timoshenko beams by using a finite dimensional model of a Timoshenko beam along with an H_∞ control design [Abstract], wherein:

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In regard to claims 1 and 6, robust control at the joint nodes [Abstract] (applicant's plurality of nodes);

a system of interconnected flexible beams [p. 2970, col. 1] (applicant's connecting nodes with beam elements); and

stabilizing and interconnected system [p. 2970, col. 1] (applicant's optimizing the design model).

In regard to claims 4 and 9, interconnection variables and the variables of each connected beam at the neighbor node [p. 2970, col. 2] (applicant's beam element shape represented by at least two design variables).

Claim Objections

4. The remaining claims 2, 3, 5, 7, 8 and 10 are objected to for incorporating the rejection of their respective base claims by dependency.

Response Guidelines

5. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).

6. **Any response to the Examiner in regard to this non-final action should be**

directed to: Russell Frejd, telephone number (703) 305-4839, Monday-Friday from 0630 to 1500 ET, or the examiner's supervisor, Jean Homere, telephone number (703) 308-6647. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

mailed to: Commissioner of Patents and Trademarks

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Washington, D.C. 20231

or faxed to: (703) 872-9306

Hand-delivered responses should be brought to 220 South 20th Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA, 22202.

Date: 17-September-2004

A handwritten signature in cursive script, reading "RUSSELL FREJD", is written over a horizontal line.

RUSSELL FREJD
PRIMARY EXAMINER